thing else that may be substituted for it. In a word, Russell has substituted a different axiom in place of the postulate of Euclid. His endeavor and achievement have however left nothing that could make a step towards disarming the pan-geometricians. We stand uninjured on the same ground as before in spite of all the desperate assaults from the strong hand of Russell, who has utterly failed to disground us.

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A MATHEMATICAL PARADOX.

The following paradox appears to me to be interesting because it shows how "common sense" breaks down when dealing with a slightly subtle question.

The question to be discussed is: Is the greatest weight that a man can lift the same as the least weight that he cannot lift, or not; and if the weights are different, which is the greater?

The numerical values of all possible weights (both those which the man A can, and those which he cannot, lift at the particular moment considered) form the simply-ordered aggregate of positive real numbers R. Those weights that A can (at this particular time) lift bring about what Dedekind* called a section (*Schnitt*) in R, and all the members of R fall into the two classes:

a. The class of those numbers x such that A can lift the weight x (then also A can lift any of the weights less than x);

b. The class of those numbers y such that A cannot lift the weight y (then also A cannot lift any of the weights greater than y).

Now, as is well known, there is one, and only one, number which "generates" this section, and this number is either the upper limit of the class (a), or the lower limit of the class (b), but not both.

Thus, our answer to the question about the weights is: *Either* there is a greatest weight that a man can lift, *or* there is a least weight that he cannot lift, *but not both.* The paradox lies in the fact that, to unaided common sense, the existence of a limit seems just as, or even more, plausible in both cases or neither as in one

* *Stetigkeit und irrationale Zahlen,* Braunschweig, 1872 and 1892 (English translation in Dedekind's *Essays on the Theory of Number,* Open Court Publishing Co., Chicago, 1901).

only. I cannot see how one is to tell in which case the limit does exist; only that it must in one, and only one, of the two cases.

In my opinion what is paradoxical to the ordinary mind in this is: We have two classes of an infinity of members each (arranged in some order); now ask a person if there is a highest in the first class; if he says "yes" (or "no") he will probably admit by parity of reasoning, that there is (or is not) a lowest in the second.

And yet my case is a translation into picturesque language of an instance well known to modern mathematicians in which the answer *must* be "yes" in the one case and "no" in the other.

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ON THE PROBLEM AND METHOD OF PSYCHOLOGY OF RELIGION.[1]

In a report before the Congress of Psychology at Geneva Prof. Harald Höffding of the University of Copenhagen undertook to sum up his theory of the psychology of religion with, we must admit, an air of easy and careless assurance. In such a delicate investigation we can not say, "I am right"; much less, "You are wrong." I am not writing at all in this spirit, and I recognize in Professor Höffding too great a degree of culture to assume it in him. However, a fear has taken possession of me and I have not succeeded in freeing myself from it. This is the fear lest Professor Höffding does not take into account so much as they deserve certain difficulties which consciousness raises against the dogmatic presuppositions which form its point of departure,—difficulties which I do not pretend have been solved and much less do I pretend to solve them myself, but whose proper comprehension will always be one step forward.

Professor Höffding's entire conception rests upon the postulate which he lays down as most natural, that the psychology of religion is a part of general psychology. However, religion does not lend itself readily to this classification, but if it did it would be so much like other questions, that if a psychology of religion existed, its first claim would be that general psychology forms a part of the psychology of religion. For it is entirely gratuitous and arbitrary to consider "religion as a particular form and a particular direction

[1] Translated from the French of Professor Billia by Lydia G. Robinson.